

FACT SHEET FOR NPDES PERMIT WA0038784

Associated Petroleum Products, Inc.

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INTRODUCTION

The Federal Clean Water Act (FCWA, 1972, and later modifications, 1977, 1981, and 1987) established water quality goals for the navigable (surface) waters of the United States. One of the mechanisms for achieving the goals of the Clean Water Act is the National Pollutant Discharge Elimination System of permits (NPDES permits), which is administered by the Environmental Protection Agency (EPA). The EPA has authorized the State of Washington to administer the NPDES permit program. Chapter 90.48 RCW defines the Department of Ecology's authority and obligations in administering the wastewater discharge permit program.

The regulations adopted by the State include procedures for issuing permits (Chapter 173-220 WAC), water quality criteria for surface and ground waters (Chapters 173-201A and 200 WAC), and sediment management standards (Chapter 173-204 WAC). These regulations require that a permit be issued before discharge of wastewater to waters of the state is allowed. The regulations also establish the basis for effluent limitations and other requirements which are to be included in the permit. One of the requirements (WAC 173-220-060) for issuing a permit under the NPDES permit program is the preparation of a draft permit and an accompanying fact sheet. Public notice of the availability of the draft permit is required at least thirty days before the permit is issued (WAC 173-220-050). The fact sheet and draft permit are available for review (see [Appendix A--Public Involvement](#) of the fact sheet for more detail on the Public Notice procedures).

The fact sheet and draft permit have been reviewed by the Permittee. Errors and omissions identified in this review have been corrected before going to public notice. After the public comment period has closed, the Department will summarize the substantive comments and the response to each comment. The summary and response to comments will become part of the file on the permit and parties submitting comments will receive a copy of the Department's response. The fact sheet will not be revised. Comments and the resultant changes to the permit will be summarized in Appendix D--Response to Comments.

GENERAL INFORMATION	
Applicant	Associated Petroleum Products, Inc.
Facility Name and Address	2320 Milwaukee Way Tacoma, WA
Type of Facility:	Bulk Petroleum Storage and Distribution
SIC Code	5171
Discharge Location	Blair Waterway via Lincoln Avenue Ditch Inner Commencement Bay Latitude: 47° 14' 61" N Longitude: 122° 24' 08" W
Water Body ID Number	WA-10-0020 (390KRD)



Figure 1. Facility Location – Vicinity.

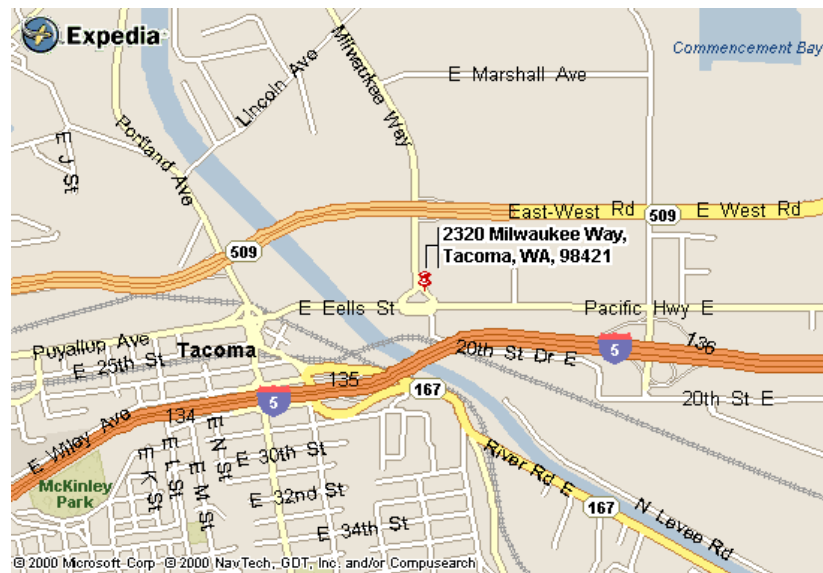


Figure 2. Facility Location – Detail.

BACKGROUND INFORMATION

DESCRIPTION OF THE FACILITY

This facility is primarily engaged in distribution of petroleum products. The Tacoma Associated Petroleum Products facility employs roughly 40-50 employees. Normal operational hours are 7-5 Monday through Friday. The office is closed on weekends. However, if product is being loaded at the tank farm, this operation could continue on the weekends.

HISTORY

Associated Petroleum Products, Inc.'s (APP's) facility on Milwaukee Avenue, Tacoma, is a fairly new facility. APP bought the site with existing warehouse, loading dock, and office facilities. APP has added a small lined tank farm that is exposed to rainfall.

INDUSTRIAL PROCESS

The facility consists of three separate tank farms. Two of the tank farms are enclosed within the warehouse building and do not have any stormwater related discharges. One of the three tank farms was added to the site and consists of six tanks with a volume of roughly 20,000 gallons each. These tanks are used for the storage of diesel fuel and lubricant oils. APP expects that the storage capacity will be used only intermittently, based on economic swings. Kerosene is also stored as product inside the warehouse.

The tank farm, exposed to rainfall, sits on a heavily reinforced concrete pad. The pad provides secondary containment for the tanks with a three and one-half foot high sidewall that incorporates a vinyl flashing into the base pad for added leak resistance. The tanks are cone-bottomed upright tanks that are securely attached to the pad. All piping is above ground with welded seams. Stormwater from the tank farm accumulates inside the berm until the discharge valve is opened. The stormwater then drains onto the adjacent truck loading pad, which is bermed and sloped to the middle. The central sump drains to the 550 gallon oil/water separator. The sump has a three-way valve that can also direct the flow to an underground 4000 gallon emergency storage tank. If a spill occurs, the contaminated water can thus be diverted to this tank for additional treatment or removal. The two enclosed tank farms within the warehouse are also connected to the oil/water separator in case of spillage and for washing down the tanks.

Discharge from the oil/water separator then mixes with other on-site stormwater that is generated by surface runoff from other on-site paved areas, and on-site buildings. The combined discharge flows through a plastic corrugated pipe to a drainage ditch just outside of APP's property fence line. The drainage ditch flows into to the Lincoln Avenue ditch, which eventually flows into the Blair Waterway.

DISCHARGE OUTFALL

Treated stormwater from the tank farm and truck loading rack joins roof and parking lot stormwater runoff in an underground vault near the oil/water separator. The combined water flows westerly on the south side of the facility via an underground pipe. The discharge enters

into an unnamed drainage ditch just outside APP's perimeter fence. The unnamed drainage ditch eventually flows into the Lincoln Avenue ditch which flows into the Inner Commencement Bay.

PERMIT STATUS

The previous permit for this facility was issued on June 29, 2001. The previous permit placed effluent limitations on pH, oil and grease, total suspended solids, benzene, BTEX, TPH-G, and TPH-D

An application for a permit was submitted to the Department on December 19, 2002, and was accepted by the Department on June 30, 2004.

SUMMARY OF COMPLIANCE WITH THE PREVIOUS PERMIT

The facility last received an inspection on January 13, 2004.

During the history of the previous permit, the Permittee has met their previous permit limitations based on Discharge Monitoring Reports (DMRs) submitted to the Department except for oil and grease (visual) during February 2002; oil and grease (average monthly and maximum daily concentration) during September 2003; and total suspended solids during (average monthly concentration) during January 2004.

WASTEWATER CHARACTERIZATION

The proposed wastewater discharge is characterized for the regulated parameters shown in Table 1. The data is obtained from the DMRs submitted to the Department from August 2001 through March 2004.

Table 1: Wastewater Characterization

Compliance Sampling Point 001 - Oil/Water Separator Effluent (Previously known as Outfall 001) Concentration				
Parameter	Min	Max	Mean	95th Percentile
Flow, gpm				
pH, s.u.	6.26	8.75	7.13	N/A
Oil and Grease, mg/L	ND	24.7	3.54	6.51
Total Suspended Solids, mg/L	ND	21.5	4.09	14.3
Benzene, µg/L	ND	ND	ND	N/A
BTEX, µg/L	ND	ND	ND	N/A
TPH-gas, mg/L	ND	ND	ND	N/A
TPH-diesel, mg/L	ND	1.90	0.728	1.80
Total Zinc, µg/L	330	4,500	1,833	4,117

It should be noted that the total zinc concentrations shown in Table 1 are the zinc concentrations measured in Stage 3 of the oil/ water separator and are not representative of the concentration that is being discharged to the stormwater drainage ditch. These concentrations do not take into account other stormwater runoff from paved areas and building roof drains. Please see further discussion of this in the section titled **Consideration of Surface Water Quality-Based Limits for Numeric Criteria** on page 9 of this Fact Sheet.

PROPOSED PERMIT LIMITATIONS

Federal and State regulations require that effluent limitations set forth in a NPDES permit must be either technology- or water quality-based. Technology-based limitations are based upon the treatment methods available to treat specific pollutants. Technology-based limitations are set by regulation or developed on a case-by-case basis (40 CFR 125.3, and Chapter 173-220 WAC). Water quality-based limitations are based upon compliance with the Surface Water Quality Standards (Chapter 173-201A WAC), Ground Water Standards (Chapter 173-200 WAC), Sediment Quality Standards (Chapter 173-204 WAC) or the National Toxics Rule (Federal Register, Volume 57, No. 246, Tuesday, December 22, 1992). The more stringent of these two limits must be chosen for each of the parameters of concern. Each of these types of limits is described in more detail below.

The limits in this permit are based in part on information received in the application. The effluent constituents in the application were evaluated on a technology- and water quality-basis. The limits necessary to meet the rules and regulations of the State of Washington were determined and included in this permit. Ecology does not develop effluent limits for all pollutants that may be reported on the application as present in the effluent. Some pollutants are not treatable at the concentrations reported, are not controllable at the source, are not listed in regulation, and do not have a reasonable potential to cause a water quality violation. Effluent limits are not always developed for pollutants that may be in the discharge but not reported as present in the application. In those circumstances the permit does not authorize discharge of the non-reported pollutants. Effluent discharge conditions may change from the conditions reported in the permit application. If significant changes occur in any constituent, as described in 40 CFR 122.42(a), the Permittee is required to notify the Department of Ecology. The Permittee may be in violation of the permit until the permit is modified to reflect additional discharge of pollutants.

TECHNOLOGY-BASED EFFLUENT LIMITATIONS

Technology-based limitations are set by regulation in the Federal effluent guidelines, or on a case-by-case basis using Best Professional Judgment (BPJ) when no effluent guidelines exist for an industrial category. Technology-based limits represent the best treatment a facility can achieve consistent with the economic means of the industry as a whole (in the case of effluent guidelines) or of the specific facility being permitted (in the case of BPJ). Technology-based effluent limits are process control parameters or numbers which indicate that a process, which in this case is stormwater treatment, is not functioning properly.

pH – The technology-based limits for pH were established in the previous permit and are standard for most NPDES permits. The pH technology-based limits are based on simple pollution prevention and neutralization techniques. Although APP does not currently use pH

neutralization techniques, there were no problems with meeting the pH permit limitations during the previous permit cycle. As a result, these pH limits will be retained for this permit.

Oil & Grease – Oil and grease technology-based limits were established in the previous permit and are consistent with the Department's policy for direct discharge which is based on the proven performance of gravity oil/water separators. It is unclear what caused the oil and grease (average monthly and maximum daily concentration) exceedences during September 2003. However, this appears to be an isolated incident since all other data shows that oil and grease are almost non-detectable. As a result, the previous technology-based limitation will be retained and used for this permit.

Total Suspended Solids – The total suspended solids (TSS) technology-based limits of 20 and 30 milligrams per liter for monthly average and daily maximum values, respectively were established in the previous permit. These limits were developed based upon actual performance of other existing bulk petroleum storage facilities and utilized BPJ in the development of these technology-based limits. These limits are lower than currently required of other similar facilities, but should nonetheless be easily attainable by APP. It is unclear what occurred at the facility in January 2004 which led to the TSS exceedance to the average monthly limit. However, this appears to be an isolated incident since all the other TSS data collected show very low (almost non-detectable) concentrations. As a result, the technology-based TSS limits established in the previous permit will be retained.

BTEX - BTEX is the sum of the concentrations of detected levels of benzene, toluene, ethylbenzene and xylenes. The limit for BTEX was established in the previous permit and is derived from the demonstrated performance of bulk petroleum tank-farms that minimize discharge of petroleum-based compounds through stormwater pollution prevention techniques and use of gravity oil/water separators followed by activated carbon filtration. Although APP currently does not utilize activated carbon filtration, there were no problems in meeting these limits during the previous permit cycle. As a result, these limits will be retained and used in this permit.

TPH-Gx and Dx – The limits for these parameters are also established as technology-based limits and are used for other similar facilities within the State. The TPH-Gx and Dx limitations used in the previous permit will be retained and used in this permit.

SURFACE WATER QUALITY-BASED EFFLUENT LIMITATIONS

In order to protect existing water quality and preserve the designated beneficial uses of Washington's surface waters, WAC 173-201A-060 states that waste discharge permits shall be conditioned such that the discharge will meet established Surface Water Quality Standards. The Washington State Surface Water Quality Standards (Chapter 173-201A WAC) is a state regulation designed to protect the beneficial uses of the surface waters of the state. Surface water quality-based effluent limitations may be based on an individual waste load allocation (WLA) or on a WLA developed during a basin wide total maximum daily loading study (TMDL).

NUMERICAL CRITERIA FOR THE PROTECTION OF AQUATIC LIFE

"Numerical" water quality criteria are numerical values set forth in the State of Washington's Water Quality Standards for Surface Waters (Chapter 173-201A WAC). They specify the levels of pollutants allowed in a receiving water while remaining protective of aquatic life. Numerical criteria set forth in the Water Quality Standards are used along with chemical and physical data for the wastewater and receiving water to derive the effluent limits in the discharge permit. When surface water quality-based limits are more stringent or potentially more stringent than technology-based limitations, they must be used in a permit.

NUMERICAL CRITERIA FOR THE PROTECTION OF HUMAN HEALTH

The U.S. EPA has promulgated 91 numeric water quality criteria for the protection of human health that are applicable to Washington State (EPA 1992). These criteria are designed to protect humans from cancer and other disease and are primarily applicable to fish and shellfish consumption and drinking water from surface waters.

NARRATIVE CRITERIA

In addition to numerical criteria, "narrative" water quality criteria (WAC 173-201A-030) limit toxic, radioactive, or deleterious material concentrations below those which have the potential to adversely affect characteristic water uses, cause acute or chronic toxicity to biota, impair aesthetic values, or adversely affect human health. Narrative criteria protect the specific beneficial uses of all fresh (WAC 173-201A-130) and marine (WAC 173-201A-140) waters in the State of Washington.

ANTIDEGRADATION

The State of Washington's Antidegradation Policy requires that discharges into a receiving water shall not further degrade the existing water quality of the water body. In cases where the natural conditions of a receiving water are of lower quality than the criteria assigned, the natural conditions shall constitute the water quality criteria. Similarly, when the natural conditions of a receiving water are of higher quality than the criteria assigned, the natural conditions shall be protected. More information on the State Antidegradation Policy can be obtained by referring to WAC 173-201A-070.

The Department has reviewed existing records and is unable to determine if ambient water quality is either higher or lower than the designated classification criteria given in Chapter 173-201A WAC; therefore, the Department will use the designated classification criteria for this water body in the proposed permit. The discharges authorized by this proposed permit should not cause a loss of beneficial uses.

CRITICAL CONDITIONS

Surface water quality-based limits are derived for the waterbody's critical condition, which represents the receiving water and waste discharge condition with the highest potential for adverse impact on the aquatic biota, human health, and existing or characteristic water body uses.

MIXING ZONES

The Water Quality Standards allow the Department of Ecology to authorize mixing zones around a point of discharge in establishing surface water quality-based effluent limits. Both "acute" and "chronic" mixing zones may be authorized for pollutants that can have a toxic effect on the aquatic environment near the point of discharge. The concentration of pollutants at the boundary of these mixing zones may not exceed the numerical criteria for that type of zone. Mixing zones can only be authorized for discharges that are receiving all known, available, and reasonable methods of prevention, control and treatment (AKART) and in accordance with other mixing zone requirements of WAC 173-201A-100.

The National Toxics Rule (EPA, 1992) allows the chronic mixing zone to be used to meet human health criteria.

DESCRIPTION OF THE RECEIVING WATER

The facility discharges to Lincoln Avenue Ditch via an unnamed stormwater drainage ditch. Lincoln Avenue Ditch drains into the Blair Waterway which has been designated as a Class B receiving water. Since both the Lincoln Avenue Ditch and the unnamed stormwater drainage ditch are unclassified waterbodies and are not discharging to a Class AA waterbody, then by definition Lincoln Avenue Ditch and the unnamed stormwater drainage ditch must be designated as Class A waters of the State (see WAC 173-201A-120(6)). Class A waters of the State shall meet or exceed the requirements for all of the following characteristic uses:

Class A (Excellent): water supply (domestic, industrial, agricultural); stock watering; fish migration; fish rearing, spawning and harvesting; wildlife habitat; primary contact recreation; sport fishing; boating and aesthetic enjoyment; commerce and navigation. Water quality of this class shall meet or exceed the requirements for all or substantially all uses.

The Blair waterway is listed in Category 5 (Requires a TMDL) of the 2002/2004 303(d) list for sediment toxicity based on bioassays that were performed on sediment samples in 1997. In the area where the Blair waterway enters Commencement Bay, benzene in the water column and hexachlorobenzene in the sediment are listed in Category 2 (Waters of Concern) of the 2002/2004 303(d) list. There are no listings for the Lincoln Avenue Ditch or the unnamed stormwater drainage ditch that drains into the Lincoln Avenue Ditch.

SURFACE WATER QUALITY CRITERIA

Applicable criteria are defined in Chapter 173-201A WAC for aquatic biota. In addition, U.S. EPA has promulgated human health criteria for toxic pollutants (EPA 1992). Criteria for this discharge are summarized in Table 2:

In the 1992 revision of the Washington Water Quality Standards (WAC 173-201A), the metals criteria were changed from being expressed as total recoverable to dissolved. The conversion was accomplished using the conversion factors (translators) recommended by EPA at the time. These conversion factors became part of the formula for calculating the criteria. In 1995, EPA also converted the national criteria for metals to a dissolved basis (FR Vol. 60, No. 86, pg. 22228-22237). EPA used different conversion ratios than those used by the Department in 1992 which resulted in a different criteria from those found in WAC 173-201A. The Department has

adopted the new national criteria into the water quality standards during the triennial review (WAC 173-201A, as amended November 18, 1997).

Table 2. Relevant Water Quality Criteria for Receiving Waterbody

pH	6.5 to 8.5 standard units
Benzene	1.2 µg/L (based on human health-based limitations)
Zinc	47 µg/L acute (based on a receiving water hardness of 35 mg/L)
Toxics	No toxics in toxic amounts (see Appendix C for numeric criteria for toxics of concern for this discharge)

It should be noted that the hardness of the receiving water is not accurately defined at this time. A hardness of 35 mg/L was assumed as an initial conservative estimate. The Permittee may propose to collect receiving water hardness data and shall submit any such proposal to the Department for review and approval. Sampling must be representative of the receiving water conditions upstream of APP's stormwater discharge and must be based on at least 10 grab samples that are collected once a month during the wet weather season. The collection of this data may result in either a lower or a higher hardness concentration to be used which, in turn, will result in either a lower or higher zinc water quality criteria.

CONSIDERATION OF SURFACE WATER QUALITY-BASED LIMITS FOR NUMERIC CRITERIA

pH – Please refer to the discussion under Technology-Based limits on page 5 of this Fact Sheet.

Toxic Pollutants--Federal regulations (40 CFR 122.44) require NPDES permits to contain effluent limits for toxic chemicals in an effluent whenever there is a reasonable potential for those chemicals to exceed the surface water quality criteria. This process occurs concurrently with the derivation of technology-based effluent limits. Facilities with technology-based effluent limits defined in regulation are not exempted from meeting the Water Quality Standards for Surface Waters or from having surface water quality-based effluent limits.

The following toxics were determined to be present in the discharge: benzene, and zinc.

Benzene – Benzene's previous technology-based limitation has been shown to be further restricted by human health-based criteria. Therefore, the human health-based criteria is adopted as the limitation as part of this permit. The Permittee is not authorized a dilution factor for benzene since monitoring data shows that they can already comply with the human health-based benzene criteria.

Total Zinc – There is insufficient data to determine whether or not zinc has a reasonable potential to exceed water quality standards at this time. Even though the data collected thus far, seems to be high, there is evidence that the zinc data collected previously is not representative of the oil/water separator and does not correspond to the actual effluent that is being discharged to the drainage ditch.

The total zinc limitation is based on the water quality criteria of 47 µg/L (based on an upstream hardness of 35 mg/L in the unnamed drainage ditch). The unnamed drainage ditch's background zinc concentration is assumed to be zero at this time. A dilution factor of 1 to 70 is

applied at this time to the zinc criteria resulting in a calculated maximum daily limit of 3,290 µg/L.

The Permittee is allowed a 1 to 70 dilution factor from the point of the treated tank farm and loading rack effluent to the point of discharge to the unnamed drainage ditch for total zinc. The source of the dilution water's flow is from the facility's non-industrial stormwater drainage flow from the site. The dilution factor is based on the ratio between the land surface area from the tank farm and loading rack and the non-industrial drainage areas (i.e. parking areas, building roofs, etc.). At this time, the dilution factor assumes that the non-industrial drainage area stormwater's zinc concentration is negligible. This dilution factor is established based on the best available information at this time.

The Department reserves the right to modify this dilution factor, in the future, based on the facility's flows, drainage system, non-industrial stormwater zinc concentration, and/or characteristics of the unnamed drainage ditch receiving water. The Department also reserves the right to request from the Permittee to provide more information regarding these issues at any time.

This permit requires an increased monitoring frequency for zinc from once per year to once per month. This permit also requires that APP develop a SWPPP and implement additional BMPs that focus on reducing possible sources of zinc.

WHOLE EFFLUENT TOXICITY

The Water Quality Standards for Surface Waters require that the effluent not cause toxic effects in the receiving waters. Many toxic pollutants cannot be detected by commonly available detection methods. However, toxicity can be measured directly by exposing living organisms to the wastewater in laboratory tests and measuring the response of the organisms. Toxicity tests measure the aggregate toxicity of the whole effluent, and therefore this approach is called whole effluent toxicity (WET) testing.

Toxicity caused by unidentified pollutants is not expected in the effluent from this discharge as determined by the screening criteria given in Chapter 173-205 WAC. Therefore, no whole effluent toxicity testing is required in this permit. The Department may require effluent toxicity testing in the future if it receives information that toxicity may be present in this effluent.

HUMAN HEALTH

Washington's water quality standards now include 91 numeric health-based criteria that must be considered in NPDES permits. These criteria were promulgated for the state by the U.S. EPA in its National Toxics Rule (Federal Register, Volume 57, No. 246, Tuesday, December 22, 1992).

The Department has determined that the Permittee's discharge contains benzene which has human health-based criteria that is more restrictive than the benzene technology-based limitation established in the previous permit. Based on a review of the Permittee's discharge data, there does not appear to be a problem with implementing the human health-based criteria for benzene in freshwaters (1.2 µg/L) as part of this permit cycle. Therefore, this permit establishes a maximum daily effluent permit limitation for benzene of 1.2 µg/L at the newly designated compliance sampling point 002 - Outfall to unnamed drainage ditch. The new point

of compliance for benzene is established because of the fact that the limit is now based on human-health surface water quality criteria.

SEDIMENT QUALITY

The Department has promulgated aquatic sediment standards (Chapter 173-204 WAC) to protect aquatic biota and human health. These standards state that the Department may require Permittees to evaluate the potential for the discharge to cause a violation of applicable standards (WAC 173-204-400).

The Department has determined through a review of the discharger characteristics and effluent characteristics that this discharge has no reasonable potential to violate the Sediment Management Standards.

GROUND WATER QUALITY LIMITATIONS

The Department has promulgated Ground Water Quality Standards (Chapter 173-200 WAC) to protect beneficial uses of ground water. Permits issued by the Department shall be conditioned in such a manner so as not to allow violations of those standards (WAC 173-200-100).

This Permittee has no discharge to ground and therefore no limitations are required based on potential effects to ground water.

Table 3. Comparison of Proposed and Existing Effluent Limitations.

Existing Limits	Proposed Limits
<i>Compliance Sampling Point 001 – Oil/Water Separator Effluent (Previously Designated as Outfall 001)</i>	
pH – between 6.0 and 9.0 standard units	pH – between 6.0 and 9.0 standard units
Oil and grease – average monthly limit of 10 mg/L; and maximum daily limit of 15 mg/L	Oil and grease – average monthly limit of 10 mg/L; and maximum daily limit of 15 mg/L
Oil and grease – no visible sheen	Oil and grease – no visible sheen
Total Suspended Solids – average monthly limit of 20 mg/L; and maximum daily limit of 30 mg/L	Total Suspended Solids – average monthly limit of 20 mg/L; and maximum daily limit of 30 mg/L
BTEX – maximum daily limit of 100 µg/L	BTEX – maximum daily limit of 100 µg/L
TPHg – maximum daily limit of 1.0 mg/L	TPHg – maximum daily limit of 1.0 mg/L
TPHd – maximum daily limit of 10.0 mg/L	TPHd – maximum daily limit of 10.0 mg/L
Benzene – maximum daily limit of 40 µg/L	Benzene – maximum daily limit of 1.2 µg/L
Total zinc – previously not limited	Total zinc – maximum daily limit of 3,290 µg/L

MONITORING REQUIREMENTS

Monitoring, recording, and reporting are required (WAC 173-220-210 and 40 CFR 122.41) to verify that the treatment process is functioning correctly and the effluent limitations are being achieved.

The monitoring schedule is detailed in the proposed permit under Condition S.1. Specified monitoring frequencies take into account the quantity and variability of the discharge, the treatment method, past compliance, significance of pollutants, and cost of monitoring.

This permit requires increased monitoring frequency for zinc (it is now once per month).

The daily pH monitoring using pH paper has been eliminated as requested by the Permittee. Our review of previous records of the pH paper logbook shows that the collection of this data no longer has much use to the Permittee or to the Department. The pH paper results were consistent with the monthly pH monitoring requirement which required the use of a pH meter.

All other monitoring requirements were kept the same as in the previous permit.

LAB ACCREDITATION

With the exception of certain parameters the permit requires all monitoring data to be prepared by a laboratory registered or accredited under the provisions of Chapter 173-50 WAC, *Accreditation of Environmental Laboratories*.

OTHER PERMIT CONDITIONS

REPORTING AND RECORDKEEPING

The conditions of S2. are based on the authority to specify any appropriate reporting and recordkeeping requirements to prevent and control waste discharges (WAC 173-220-210).

NON-ROUTINE AND UNANTICIPATED DISCHARGES

Occasionally, this facility may generate wastewater which is not characterized in their permit application because it is not a routine discharge and was not anticipated at the time of application. These typically are waters used to pressure test storage tanks or fire water systems or leaks from drinking water systems. These are typically clean waste waters but may be contaminated with pollutants. The permit contains an authorization for non-routine and unanticipated discharges. The permit requires a characterization of these waste waters for pollutants and examination of the opportunities for reuse. Depending on the nature and extent of pollutants in this wastewater and opportunities for reuse, Ecology may authorize a direct discharge via the process wastewater outfall or through a stormwater outfall for clean water, require the wastewater to be placed through the facilities wastewater treatment process or require the water to be reused.

SPILL PLAN

The Department has determined that the Permittee stores a quantity of chemicals that have the potential to cause water pollution if accidentally released. The Department has the authority to require the Permittee to develop best management plans to prevent this accidental release under section 402(a)(1) of the Federal Water Pollution Control Act (FWPCA) and RCW 90.48.080.

The Permittee has developed a plan for preventing the accidental release of pollutants to state waters and for minimizing damages if such a spill occurs. The proposed permit requires the Permittee to update this plan and submit it to the Department.

SOLID WASTE PLAN

The discharge of leachate from solid waste is not authorized by this permit. Therefore a solid waste control plan is not required as part of this permit.

TREATMENT SYSTEM OPERATING PLAN

In accordance with state and federal regulations, the Permittee is required to take all reasonable steps to properly operate and maintain the treatment system (40 CFR 122.41(e)) and WAC 173-220-150 (1)(g). An operation and maintenance manual was submitted as required by state regulation for the construction of wastewater treatment facilities (WAC 173-240-150). It has been determined that the implementation of the procedures in the Treatment System Operating Plan is a reasonable measure to ensure compliance with the terms and limitations in the permit.

GENERAL CONDITIONS

General Conditions are based directly on state and federal law and regulations and have been standardized for all individual industrial NPDES permits issued by the Department.

PERMIT ISSUANCE PROCEDURES

PERMIT MODIFICATIONS

The Department may modify this permit to impose numerical limitations, if necessary to meet Water Quality Standards for Surface Waters, Sediment Quality Standards, or Water Quality Standards for Ground Waters, based on new information obtained from sources such as inspections, effluent monitoring, outfall studies, and effluent mixing studies.

The Department may also modify this permit as a result of new or amended state or federal regulations.

RECOMMENDATION FOR PERMIT ISSUANCE

This proposed permit meets all statutory requirements for authorizing a wastewater discharge, including those limitations and conditions believed necessary to control toxics, protect human health, aquatic life, and the beneficial uses of waters of the State of Washington. The Department proposes that this proposed permit be issued for a period of a little less than 5 years until June 30, 2009. This is necessary to synchronize with Ecology's basin-wide schedule for permit issuance in the South Puget Sound area. With the next permit cycle starting July 1, 2009, this permit is expected to be reissued for the next regular five-year cycle.

REFERENCES FOR TEXT AND APPENDICES

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APPENDIX A--PUBLIC INVOLVEMENT INFORMATION

The Department has tentatively determined to reissue a permit to the applicant listed on page 1 of this fact sheet. The permit contains conditions and effluent limitations which are described in the rest of this fact sheet.

Public notice of application was published on May 16, 2004 and May 23, 2004 in the *News Tribune* to inform the public that an application had been submitted and to invite comment on the reissuance of this permit.

The Department will publish a Public Notice of Draft (PNOD) on (date) in the *News Tribune* to inform the public that a draft permit and fact sheet are available for review. Interested persons are invited to submit written comments regarding the draft permit. The draft permit, fact sheet, and related documents are available for inspection and copying between the hours of 8:00 a.m. and 5:00 p.m. weekdays, by appointment, at the regional office listed below. Written comments should be mailed to:

Industrial Unit Permit Coordinator
Department of Ecology
Southwest Region - Water Quality
P.O. Box 47775
Olympia, WA 98504-7775

Any interested party may comment on the draft permit or request a public hearing on this draft permit within the thirty (30) day comment period to the address above. The request for a hearing shall indicate the interest of the party and reasons why the hearing is warranted. The Department will hold a hearing if it determines there is a significant public interest in the draft permit (WAC 173-220-090). Public notice regarding any hearing will be circulated at least thirty (30) days in advance of the hearing. People expressing an interest in this permit will be mailed an individual notice of hearing (WAC 173-220-100).

Comments should reference specific text followed by proposed modification or concern when possible. Comments may address technical issues, accuracy and completeness of information, the scope of the facility's proposed coverage, adequacy of environmental protection, permit conditions, or any other concern that would result from issuance of this permit.

The Department will consider all comments received within thirty (30) days from the date of public notice of draft indicated above, in formulating a final determination to issue, revise, or deny the permit. The Department's response to all significant comments is available upon request and will be mailed directly to people expressing an interest in this permit.

Further information may be obtained from the Department by telephone, 360/407-6280, email at lcon461@ecy.wa.gov or by writing to the address listed above.

This permit and fact sheet were written by John Diamant, P.E.

APPENDIX B--GLOSSARY

Acute Toxicity--The lethal effect of a compound on an organism that occurs in a short period of time, usually 48 to 96 hours.

AKART-- An acronym for "all known, available, and reasonable methods of treatment".

Ambient Water Quality--The existing environmental condition of the water in a receiving water body.

Ammonia--Ammonia is produced by the breakdown of nitrogenous materials in wastewater. Ammonia is toxic to aquatic organisms, exerts an oxygen demand, and contributes to eutrophication. It also increases the amount of chlorine needed to disinfect wastewater.

Average Monthly Discharge Limitation--The average of the measured values obtained over a calendar month's time.

Best Management Practices (BMPs)--Schedules of activities, prohibitions of practices, maintenance procedures, and other physical, structural and/or managerial practices to prevent or reduce the pollution of waters of the State. BMPs include treatment systems, operating procedures, and practices to control: plant site runoff, spillage or leaks, sludge or waste disposal, or drainage from raw material storage. BMPs may be further categorized as operational, source control, erosion and sediment control, and treatment BMPs.

BOD₅--Determining the Biochemical Oxygen Demand of an effluent is an indirect way of measuring the quantity of organic material present in an effluent that is utilized by bacteria. The BOD₅ is used in modeling to measure the reduction of dissolved oxygen in a receiving water after effluent is discharged. Stress caused by reduced dissolved oxygen levels makes organisms less competitive and less able to sustain their species in the aquatic environment. Although BOD is not a specific compound, it is defined as a conventional pollutant under the federal Clean Water Act.

Bypass--The intentional diversion of waste streams from any portion of a treatment facility.

Chlorine--Chlorine is used to disinfect wastewaters of pathogens harmful to human health. It is also extremely toxic to aquatic life.

Chronic Toxicity--The effect of a compound on an organism over a relatively long time, often 1/10 of an organism's lifespan or more. Chronic toxicity can measure survival, reproduction or growth rates, or other parameters to measure the toxic effects of a compound or combination of compounds.

Clean Water Act (CWA)--The Federal Water Pollution Control Act enacted by Public Law 92-500, as amended by Public Laws 95-217, 95-576, 96-483, 97-117; USC 1251 et seq.

Compliance Inspection - Without Sampling--A site visit for the purpose of determining the compliance of a facility with the terms and conditions of its permit or with applicable statutes and regulations.

Compliance Inspection - With Sampling--A site visit to accomplish the purpose of a Compliance Inspection - Without Sampling and as a minimum, sampling and analysis for all parameters with limits in the permit to ascertain compliance with those limits; and, for municipal facilities, sampling of influent to ascertain compliance with the 85 percent removal requirement. Additional sampling may be conducted.

Composite Sample--A mixture of grab samples collected at the same sampling point at different times, formed either by continuous sampling or by mixing discrete samples. May be "time-composite"(collected at constant time intervals) or "flow-proportional" (collected either as a constant sample volume at time intervals proportional to stream flow, or collected by increasing the volume of each aliquot as the flow increased while maintaining a constant time interval between the aliquots.

Construction Activity--Clearing, grading, excavation and any other activity which disturbs the surface of the land. Such activities may include road building, construction of residential houses, office buildings, or industrial buildings, and demolition activity.

Continuous Monitoring--Uninterrupted, unless otherwise noted in the permit.

Critical Condition--The time during which the combination of receiving water and waste discharge conditions have the highest potential for causing toxicity in the receiving water environment. This situation usually occurs when the flow within a water body is low, thus, its ability to dilute effluent is reduced.

Dilution Factor--A measure of the amount of mixing of effluent and receiving water that occurs at the boundary of the mixing zone. Expressed as the inverse of the percent effluent fraction e.g., a dilution factor of 10 means the effluent comprises 10% by volume and the receiving water 90%.

Engineering Report--A document which thoroughly examines the engineering and administrative aspects of a particular domestic or industrial wastewater facility. The report shall contain the appropriate information required in WAC 173-240-060 or 173-240-130.

Fecal Coliform Bacteria--Fecal coliform bacteria are used as indicators of pathogenic bacteria in the effluent that are harmful to humans. Pathogenic bacteria in wastewater discharges are controlled by disinfecting the wastewater. The presence of high numbers of fecal coliform bacteria in a water body can indicate the recent release of untreated wastewater and/or the presence of animal feces.

Grab Sample--A single sample or measurement taken at a specific time or over as short period of time as is feasible.

Industrial Wastewater--Water or liquid-carried waste from industrial or commercial processes, as distinct from domestic wastewater. These wastes may result from any process or activity of industry, manufacture, trade or business, from the development of any natural resource, or from animal operations such as feed lots, poultry houses, or dairies. The term includes contaminated storm water and, also, leachate from solid waste facilities.

Major Facility--A facility discharging to surface water with an EPA rating score of > 80 points based on such factors as flow volume, toxic pollutant potential, and public health impact.

Maximum Daily Discharge Limitation--The highest allowable daily discharge of a pollutant measured during a calendar day or any 24-hour period that reasonably represents the calendar day for purposes of sampling. The daily discharge is calculated as the average measurement of the pollutant over the day.

Method Detection Level (MDL)--The minimum concentration of a substance that can be measured and reported with 99% confidence that the analyte concentration is above zero and is determined from analysis of a sample in a given matrix containing the analyte.

Minor Facility--A facility discharging to surface water with an EPA rating score of < 80 points based on such factors as flow volume, toxic pollutant potential, and public health impact.

Mixing Zone--An area that surrounds an effluent discharge within which water quality criteria may be exceeded. The area of the authorized mixing zone is specified in a facility's permit and follows procedures outlined in state regulations (Chapter 173-201A WAC).

National Pollutant Discharge Elimination System (NPDES)--The NPDES (Section 402 of the Clean Water Act) is the Federal wastewater permitting system for discharges to navigable waters of the United States. Many states, including the State of Washington, have been delegated the authority to issue these permits. NPDES permits issued by Washington State permit writers are joint NPDES/State permits issued under both State and Federal laws.

pH--The pH of a liquid measures its acidity or alkalinity. A pH of 7 is defined as neutral, and large variations above or below this value are considered harmful to most aquatic life.

Quantitation Level (QL)--A calculated value five times the MDL (method detection level).

Responsible Corporate Officer--A president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy- or decision-making functions for the corporation, or the manager of one or more manufacturing, production, or operating facilities employing more than 250 persons or have gross annual sales or expenditures exceeding \$25 million (in second quarter 1980 dollars), if authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures (40 CFR 122.22).

Technology-based Effluent Limit--A permit limit that is based on the ability of a treatment method to reduce the pollutant.

Total Suspended Solids (TSS)--Total suspended solids is the particulate material in an effluent. Large quantities of TSS discharged to a receiving water may result in solids accumulation. Apart from any toxic effects attributable to substances leached out by water, suspended solids may kill fish, shellfish, and other aquatic organisms by causing abrasive injuries and by clogging the gills and respiratory passages of various aquatic fauna. Indirectly, suspended solids can screen out light and can promote and maintain the development of noxious conditions through oxygen depletion.

State Waters--Lakes, rivers, ponds, streams, inland waters, underground waters, salt waters, and all other surface waters and watercourses within the jurisdiction of the state of Washington.

Stormwater--That portion of precipitation that does not naturally percolate into the ground or evaporate, but flows via overland flow, interflow, pipes, and other features of a storm water drainage system into a defined surface water body, or a constructed infiltration facility.

Upset--An exceptional incident in which there is unintentional and temporary noncompliance with technology-based permit effluent limitations because of factors beyond the reasonable control of the Permittee. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, lack of preventative maintenance, or careless or improper operation.

Water Quality-based Effluent Limit--A limit on the concentration of an effluent parameter that is intended to prevent the concentration of that parameter from exceeding its water quality criterion after it is discharged into a receiving water.

APPENDIX C--RESPONSE TO COMMENTS